STATE OF VERMONT

PUBLIC SERVICE BOARD

Joint Petition of Green Mountain Power Corporation, Vermont Electric Cooperative, Inc. and Vermont Electric Power Company, Inc. for a Certificate of Public Good pursuant to 30 V.S.A. § 248, to construct up to a 63 MW wind electric generation facility and associated facilities on Lowell Mountain in Lowell, Vermont and the installation or upgrade of approximately 16.9 miles of transmission line and associated substations in Lowell, Westfield and Jay, Vermont	)	Docket No. _____

PREFILED TESTIMONY OF
JEFFREY A. WALLIN
ON BEHALF OF GREEN MOUNTAIN POWER CORPORATION

May 21, 2010

Summary of Testimony

Mr. Wallin sponsors his analysis of potential impacts of the Kingdom Community Wind Project on necessary wildlife habitats for white-tailed deer and black bear, and moose winter concentration areas. Through habitat avoidance and, if deemed necessary, on-site mitigation, the development of the Project will result in no undue adverse impact on necessary wildlife habitats.

PREFILED TESTIMONY OF JEFFREY A. WALLIN
ON BEHALF OF
GREEN MOUNTAIN POWER COPRPORATION

1. Q. Please state your name, current position, employer and business address.

A. My name is Jeffrey Wallin. I am the founder and sole proprietor of Multiple Resource Management, Inc., a firm that specializes in wildlife consulting. My business address is 113 Stonebroke Road, Leicester, Vermont.

2. Q. Please state briefly your educational background and business experience.

A. My undergraduate degree was a Bachelor of Science in Forestry/Wildlife from the University of Vermont in 1970. I also obtained a Master of Science degree in Natural Resource Planning (Wildlife Biology) from the University of Vermont in 1983. I worked for nearly 12 years for the State of Vermont as a Wildlife Biologist and have been a wildlife consultant for 27 years. My work experience includes assessment of wildlife habitat and populations, and population management; mitigation of environmental conflicts with development; long term forest and wildlife management plan preparation; design and implementation of site-specific or species-specific research studies including custom design of wildlife corridor movement studies; wildlife habitat appraisal and expert testimony in connection with local, state and federal regulations; accurate mapping of remote habitat and features using sub-meter mapping grade Global Positioning System (GPS) satellite technology; hydroelectric generation license preparation involving water quality data collection, stream flow measurements, minimum flow determination, wildlife impact appraisal, and fisheries population modeling. Clients have

included developers, planners, professional corporations, banks, utilities, industry, ski areas, state government, and municipalities. My résumé is attached as **Exh. Pet.-JAW-1**.

3. Q. Have you ever testified before the Public Service Board?

A. Yes. I provided testimony on similar topics of necessary wildlife habitats in the following Dockets: Docket No. 7250, in support of the Certificate of Public Good ("CPG") authorizing the Deerfield Wind project; Docket No. 7156 on behalf of UPC Vermont Wind, LLC in support of that company's petition for a CPG authorizing a wind turbine facility in Sheffield, Vermont; Docket 6786 in the petition of Catamount Energy Corporation for a CPG authorizing the installation of two temporary wind measurement towers on the ridgeline of Glebe Mountain; and, in the mid-1990's, Docket No. 5823 authorizing Green Mountain Power's Searsburg wind energy facility. Additionally, I have provided expert testimony in numerous Act 250 land use cases before most Environmental Commissions in the state and the Environmental Board. I have also testified in Environmental Court and in Bennington County Superior Court.

4. Q. Please summarize your testimony.

A. I was hired by Green Mountain Power Corporation ("GMP") to investigate and evaluate the potential impacts of the proposed Kingdom Community Wind Project (the "Project") on necessary wildlife habitats for black bear and white-tailed deer, and potential impacts on moose winter habitat. My analysis is contained in my report entitled "Necessary Wildlife Habitat Assessment and Mapping For Black Bear and White-tailed Deer, and Winter Concentration Habitat for Moose," attached as **Exh. Pet.-JAW-2.** The Project will not result in

undue adverse impact to deer or moose winter shelter. Though much of the necessary wildlife habitat for black bears can be avoided as stated in the above cited report, total avoidance is unrealistic. The acreage of maximum potential impact to bear-scarred beach ("BSB") habitat within the direct investigation area is 70 acres, of which the actual impact is approximately 27 acres. Adequate resources do exist on-site to allow for proper and reasonable mitigation to the extent necessary to address any habitat that may be destroyed or significantly imperiled. Because of this, I conclude that there will be no undue adverse impact on black bear habitat.

5. Q. Have potential necessary wildlife habitat impacts to transmission related development been reviewed?

A. Yes. More defined engineering has been performed on the transmission line running from the Project to the Jay Tap on the VELCO line since my report was submitted. This transmission line follows an existing distribution line that may require minor expansion of the cleared right-of-way. It was first reviewed on aerial orthophoto maps to determine if any Agency of Natural Resources (ANR) mapped deer winter shelters (DWS) came into play. Additionally, the transmission corridor was also examined for softwood shelter not previously mapped by the Agency but that might offer winter shelter to deer. Any sites identified on paper were subsequently examined in the field for potential impact.

For the most part, this transmission line runs adjacent to state and town roads and existing development; consequently, human disturbance to adjacent wildlife habitats already plays a role. An ANR previously mapped DWS adjoins the transmission line approximately three miles north

of the wind Project (**Exh. Pet.-JAW-3**, Map 1, Site 1). No signs of present use as a DWS (browsing, tracks or pellet groups) were found, in fact, available browse was growing out of reach. The direction of potential corridor widening is to the immediate west of the transmission line where there is a steep downgrade which should mitigate the need for excessive corridor expansion and avoid impact to the site.

Three other sites along the transmission line exhibited signs of deer winter activity, albeit extremely light. These 3 sites are separated from existing human disturbance via horizontal distance or vertical separation. The first of these sites (Map 2, Site 2) is located on the Lowell/Westfield town line and on the east side of Rt. 100. The power line is between the highway and a steep to near vertical ledge to the east. Good hemlock cover exists at the top of the ledge where an old wildlife trail was visible. The quality of the cover exceeds the apparent use of the area as, again, browse species are growing out of reach and no pellet groups were visible. Because the habitat is so high above the transmission line, selective cutting of potential hazard trees may be done with little to no impact to the shelter quality of the habitat.

The second potential site not previously mapped by the ANR (Map 3, Site 3), is on the west side of North Hill Road immediately north of Westfield village. Here, the transmission line is set to the west well back from the town road. Near contiguous softwood cover follows the power line on the west side from utility pole 122 to pole 129. The three basic signs of DWS (browsing, tracks and pellet groups) were apparent on the west side of the power line, albeit light, but still with a substantial amount of browse growing out of reach. The east side of the power line

through this reach has two blocks of softwood broken up by open meadow and hardwoods. These softwood blocks have been compromised by logging and are in closer proximity to existing human disturbance, rendering them of less value than the cover to the west of the power line. Should corridor expansion be necessary through this reach, consideration should be given to directing all of the expansion to the east side of the existing corridor clearing and thus avoiding any adverse impact to the contiguous habitat on the west side of the transmission line.

The third unmapped site showing potential for DWS (Map 4, Site 4) is located on the west side of Cross Road approximately 1 to 1½ miles south of the junction of VT Rt. 242. The power line is separated from the town road along much of the reach bordered by softwood cover. Habitat value is greater east of the power line than within the two islands of softwood cover between the power line and the town road. As with the previous site, concentrating necessary expansion to one side of the existing corridor, in this case the west side, will avoid adverse impact to the shelter value of this habitat.

Of the four DWS's cited above and shown in **Exh. Pet.-JAW-3** (1 previously mapped, 3 unmapped), two have topographic constraints that will minimize clearing (Sites 1 and 2) and two have opportunity for realignment to limit expansion to only one side of the existing corridor, hence, avoiding more valuable habitat (Sites 3 and 4). Advantage can be taken of these physiographic opportunities resulting in no undue adverse impact to DWS should transmission corridor expansion be necessary.

6. Q. Does this conclude your testimony?

A. Yes.